WIfI: Highlighting hotspots of limb loss?

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WIfI: Highlighting hotspots of limb loss?

The past three decades have established that limb loss is a multifactorial process. Alongside this growing appreciation, tools have been developed to aid clinicians in stratifying patients into high and low risk groups. The Society for Vascular Surgery Wound, Ischaemia and foot Infection (WIfI) classification was born out of the recognition that existing classification systems had deficiencies in the description of at least one domain.[1] For example the Rutherford classification provides a granular description of the effects of tissue ischaemia, but fails to account for the role of foot infection in limb loss.[2] Conversely, the University of Texas classification system incorporates elements of all three factors, but lacks granularity as it dichotomises both infection and ischaemia into either present or absent.[3]

A classification system is prognostically useful if it successfully divides patients into low, intermediate and high-risk groups. In a study published in this edition of the *journal,* van Reijen et al.[4] have for the first time provided us with high quality evidence that the WIfI score does successfully group patients into risk categories. In this systematic review, the authors identified 12 studies incorporating 2669 patients from centres in Japan, Europe and the United States, showing that there is a clear difference in limb salvage and amputation-free survival between patients classified as high or low risk (clinical stages 4 and 1 respectively) according to WIfI. The difference in outcomes between patients in intermediate groups were less impressive.

The main limitation of the study (highlighted by the fact that the GRADE level of evidence was either low or very low for all outcomes) is that there was no adjustment for either patient treatment modality or comorbidity. Significant heterogeneity was evident, both within and between included studies, with patients treated conservatively, endovascularly or surgically all analysed together. It is entirely possible, therefore, that the lack of any significant difference in outcomes between patients in clinical stages 2 and 3 are simply a reflection of successful revascularization of stage 3 patients.

This study has highlighted two important messages. Firstly, we can have confidence that the WIfI score provides an appropriate method for stratifying patients into high and low risk groups. Furthermore, it has highlighted the fact that to properly validate a classification system in patients with chronic limb-threatening ischaemia, we must also be able to quantify the risks and benefits of attempted revascularization.

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